

Lescut™ Torpedo Countermeasure for Surface Ships



Defend your ship from acoustic torpedoes

Benefits

- Automated and lightweight
- Designed to respond simultaneously to multiple torpedoes of various types
- Deception of incoming torpedoes via tailored acoustic transmissions
- Short reaction time

Intelligent, Reliable Countermeasure

Modern acoustic torpedoes, with advanced features that greatly enhance their capabilities, are a major threat to surface combatants. Defeating these threats requires sophisticated, quick response, automated Countermeasures.

Lescut is an intelligent, third generation reactive Countermeasure, designed to identify the incoming threat and provide a customized response. Surface vessel - launched, Lescut is designed to respond simultaneously to multiple torpedoes of various types - active, passive, and pactive - and programmed to defeat all types of modern torpedo logic, including range gates, Doppler shift, pulse discrimination, AGC/DVG, and more. Lescut requires no pre-launch input or tests, shortening the response time and eliminating

errors due to incorrect settings or operator mistakes.

Lescut is based on the Ultra Electronic Oceans Systems hardware and Rafael's proven reactive acoustic module electronics and software.

Operational Technique

Countermeasure operation starts automatically after launch, with the Lescut suspended to its operating depth. Lescut analyzes the environment and the torpedo and then selects from its threat library the appropriate deception signal for emission. As a result, acoustic torpedoes home in on Lescut as the legitimate target, attacking it repeatedly, enabling the ship to evade a torpedo hit. Lescut operates for ten minutes, then self-destructs and sinks.



Operation Sequence

- System controller sends coded firing signal to Countermeasure
- Electronic timer extracts deployment range information and sends firing pulse to rocket motor
- S&A mechanism ensures muzzle and trajectory safety
- Payload deployed at required range
- Analyzes acoustic environment and sends signal to deceive or seduce torpedo
- Torpedo homes in on Lescut as preferred target
- Torpedo again deceived by Lescut transmissions and re-attacks until end of run

Technical Specifications

Diameter	12.375 cm
Length	91.4-122.7 cm
Weight	4.5-24.8 kg
Frequency range	17-85 kHz
Source level	>180 dB re mPa @ 1 m
Receive sensitivity	130 dB re/mPa
Operating life	10 minutes
Operating parameters	Programmable reactive
Complies with MIL-STD environment parameters	



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